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Item 4 (i) of the provisional agenda*
Review of the implementation of the 2030 Agenda for
Sustainable Development in Asia and the Pacific:
information and communications technology, science,
technology and innovation

Digital connectivity and the digital economy

Note by the secretariat

Summary

>   The present document contains a review of the key issues with regard to digital connectivity and the digital economy in the region. Part I of the document contains key findings of the secretariat's analytical and research work on emerging regional policy challenges as well as opportunities from enhanced digital technologies and connectivity for all. Evidence is provided on the cross-sectoral benefits emerging from the accelerated development of regional broadband connectivity through the Asia-Pacific information superhighway. Some of the benefits of encouraging infrastructure sharing and co-deployment, as well as expanding public Wi-Fi, as cost-efficient, scalable digital technologies are highlighted. The growing digital divide is an urgent regional policy priority as its risks amplify development gaps across the region.

>   Part II contains a review of how digital connectivity, together with other factors such as technology and innovation, is shaping the evolution of the digital economies of countries in the region. Emphasis is placed on electronic commerce as a key component of the digital economy. Electronic commerce can be leveraged by the countries in the region to pursue inclusive and sustainable development. However, many developing countries – including the least developed countries in the region – are still at the nascent stage of electronic commerce development. The opportunities, challenges and solutions for developing electronic commerce in the region are reviewed.

>   The Economic and Social Commission for Asia and the Pacific may wish to review the findings and policy recommendations and provide the secretariat with guidance on the future direction of work related to digital connectivity and the digital economy.

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*   ESCAP/75/L.1.

I. Digital connectivity

A. Introduction

1. Despite rapid advances in emerging technologies, the implementation of the Sustainable Development Goals in Asia and the Pacific has been constrained by the widening broadband divide. In order to understand the root causes and impacts of this divide, the secretariat conducted research and analysis and presented the findings to the Asia-Pacific Information Superhighway Steering Committee and the Committee on Information and Communications Technology, Science, Technology and Innovation at its the second session, which was held in 2018. The activities and outcomes of the meetings are summarized in another document submitted to the Economic and Social Commission for Asia and the Pacific (ESCAP) at its present session (ESCAP/75/4).

2. The present document contains the key findings of the secretariat's analytical work and research on emerging challenges and opportunities in enhancing digital technology for all in Asia and the Pacific. In particular, the research supports the cross-sectoral approach to the development of regional broadband connectivity and the implementation of the Master Plan for the Asia-Pacific Information Superhighway and the Asia-Pacific Information Superhighway Regional Cooperation Framework Document. Included are highlights of some of the benefits of expanding Internet access through innovative digital technologies that are cost-efficient and scalable to connect the unconnected in the region.

3. Innovative digitally led technologies have been transforming businesses and economies through smart supply chains, intelligent logistics, software-defined factories and intelligent manufacturing. These new technologies not only impact economies but also a wide range of sectors, ushering in precision agriculture, accurate medical diagnosis, evidence-based disaster risk reduction and predictive business insights, just to name a few.

4. Affordable and resilient broadband infrastructure that is readily accessible to connect people and devices is a prerequisite and foundation for such development and the application of new technologies. In its research, ESCAP has found that the widening broadband divide between countries in the region is alarming and that members with special needs, such as the least developed countries, landlocked developing countries and small island developing States, are at risk of being left further behind as a result of their exclusion from bandwidth-intense technological applications and services. This widening broadband divide, if not addressed soon, will become increasingly difficult to close, which will hinder member States' efforts to achieve sustainable development as digital technologies permeate into an increasing number of sectors.

5. Given the emergence of broadband-dependent digital technologies such as the Internet of things, cloud computing, big data and machine learning, the countries with extensive broadband networks are expected to advance more rapidly than the rest in the development and roll-out of these advanced technologies. Considering the fact that information and communications technology (ICT) is a meta-infrastructure, such a divide would also impact the development of other infrastructure, such as intelligent transport systems, digital trade and smart grids. In addition, ICT is considered a means of implementation and enabler of the Sustainable Development Goals; the differential level and quality of broadband access will inevitably impact the

capacity, speed and quality of efforts for the achievement of the Goals. The goal of the Asia-Pacific Information Superhighway initiative is to support the efforts to achieve Sustainable Development Goal 4 (Quality education), Goal 5 (Gender equality), Goal 9 (Industry, innovation and infrastructure) and Goal 17 (Partnerships for the Goals).

B. The broadband divide in Asia and the Pacific

1. Fixed broadband

6.   Overall, the Asia-Pacific region has demonstrated steady growth in access to fixed broadband compared to the past decade. Judging from the 2017 data,[1] a large share of the world's total fixed-broadband subscriptions was found in the Asia-Pacific region (59 per cent), followed by Europe (19 per cent) and North America (12 per cent). With regard to the subregional broadband divide in Asia and the Pacific, the total number of fixed-broadband subscriptions in 2017 derived predominantly from East and North-East Asia (77 per cent), followed by South and South-West Asia (9 per cent), North and Central Asia (7 per cent), South-East Asia (6 per cent) and the Pacific (2 per cent). The concentration of fixed-broadband subscriptions in East and North-East Asia has been intensifying over recent years. The gap between high-income countries and low-income countries has been steadily widening, while upper middle-income countries have picked up the pace (figures I and II).

Figure I
Average fixed-broadband subscriptions per 100 habitants, by subregion, 2006–2011 and 2012–2017
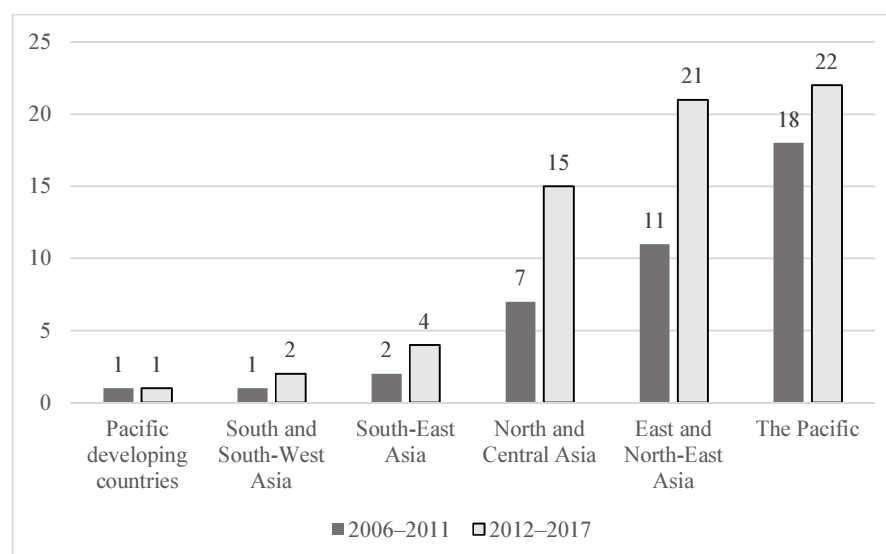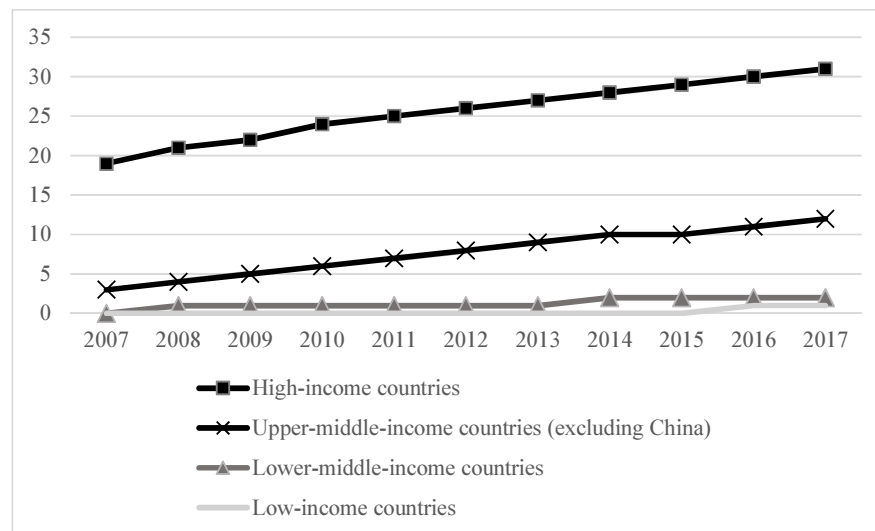

Source: ESCAP calculations based on data from International Telecommunication Union (ITU), World Telecommunication/ICT Indicators database 2018. Available at www.itu.int/en/ITU-D/Statistics/Pages/publications/wtid.aspx (accessed on 7 December 2018).

Note: The category entitled "Pacific developing countries" excludes Australia and New Zealand.

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[1]   International Telecommunication Union (ITU), World Telecommunication/ICT Indicators database 2018. Available at www.itu.int/en/ITU-D/Statistics/Pages/publications/wtid.aspx (accessed on 7 December 2018).

Figure II
Fixed-broadband subscriptions per 100 inhabitants, by income group, 2007–2017
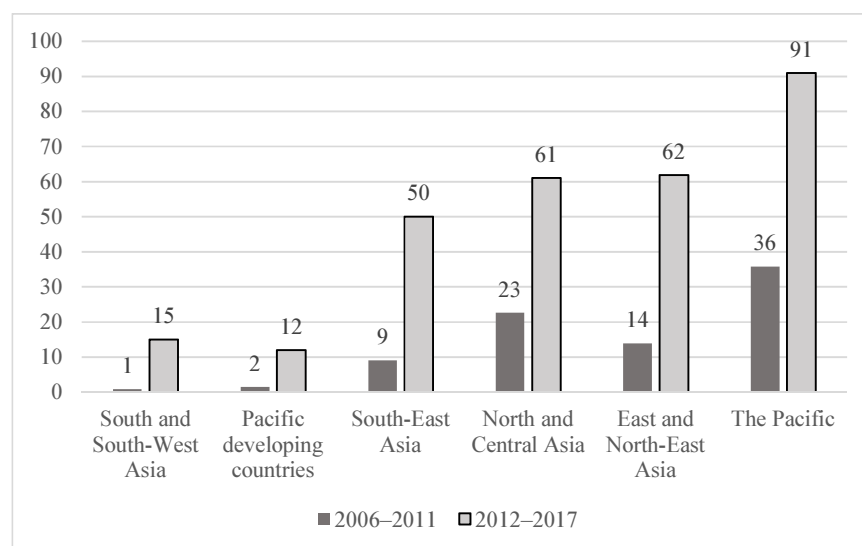

Source: ESCAP calculations based on data from ITU, World Telecommunication/ICT Indicators database 2018 (see figure I).

2. Mobile broadband

7.   Asia and the Pacific performed much better in terms of mobile-broadband uptake. Figure III shows that the average number of mobile-broadband subscriptions per 100 inhabitants was highest in the Pacific (driven by Australia and New Zealand), followed by East and North-East Asia (driven by Japan and the Republic of Korea). There has been rapid expansion in many countries in North and Central Asia and South-East Asia.

Figure III
Average mobile-broadband subscriptions per 100 habitants, by subregion, 2006–2011 and 2012–2017
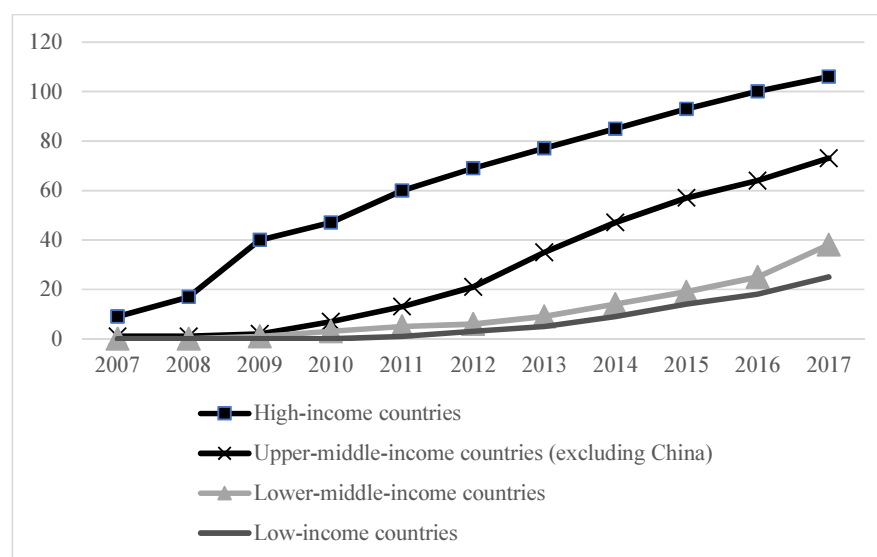

Source: ESCAP calculations based on data from ITU, World Telecommunication/ICT Indicators database 2018 (see figure I).

Note: The category entitled "Pacific developing countries" excludes Australia and New Zealand.

8.	In figure IV, significant expansion can also be observed in mobile-broadband subscriptions across all income groups. However, as in the case of fixed-broadband subscriptions, middle- and low-income countries will not be able to catch up with high-income countries if they continue to develop mobile-broadband networks and access at the current pace. Considering the emergence of artificial intelligence and associated digital technologies, more innovative and cost-efficient means of broadband deployment is needed to narrow the digital divide and accelerate digital inclusion for the achievement of the Sustainable Development Goals. Additionally, concerted and targeted support to countries with special needs will be needed as a matter of priority.

Figure IV
Mobile-broadband subscriptions per 100 inhabitants, by income group, 2007–2017

Source: ESCAP calculations based on data from ITU, World Telecommunication/ICT Indicators database 2018 (see figure I).

9.	Using the latest data from 100 countries and 5,069 survey respondents, the Economist Intelligence Unit concluded in a recently published report that mobile-broadband expansion has been slowing due to the increased costs of mobile data and devices. This trend is worrisome, as women are more likely to rely on mobile access to use the Internet than men. Low income countries are also identified as falling behind in the transition to fourth-generation wireless systems (4G) technologies.[2]

## C.	Infrastructure sharing and co-deployment as a means to reduce broadband deployment costs and increase affordability

10.	In the absence of robust fixed- and mobile-broadband networks and access, most people in countries with special needs do not benefit fully from the rapid advancements of digital technologies and the opportunities they offer. In order to combat disparities, it is necessary to investigate the main factors that hold back broadband development in countries with special needs.

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[2]	Economist Intelligence Unit, "The Inclusive Internet Index 2019: Executive Summary", 2019.

11.   Some of special challenges faced by the countries with special needs are related to geography and demography. Lack of access to the sea increases prices for international connectivity for landlocked developing countries. For small island developing States, market size and the size of the islands create a problem with the roll-out of terrestrial fibre-optic cables. These issues are exacerbated since some landlocked developing countries have large mountainous, sparsely populated and rural areas, resulting in higher capital investment and operation costs. The least developed countries tend to lag behind developed countries in terms of fixed-broadband penetration, household access to ICT, and Internet uptake.[3]

12.   Another challenge countries with special needs, and in particular landlocked developing countries and least developed countries, face is the cost associated with the construction of fibre-optic cables and the subsequent lack of broadband affordability at the user level. ESCAP conducted case studies on reducing costs by using co-deployment between ICT and transport sectors in Bangladesh, India and Myanmar.[4]

13.   Another co-deployment option is implementation along power grids. For example, a forthcoming ESCAP study examines the case of Bhutan. Bhutan Telecom Ltd. and Bhutan Power Corporation first co-deployed fibre-optic cable in 2003. The Optical Power Ground Wire, a fibre-optic network, was constructed over the Bhutan Power Corporation's power transmission line between Thimphu and Phuentsholing, ultimately connecting to the Indian fibre-optic cable system to access the submarine cable for international connectivity.[5]

14.   However, these types of co-deployment solutions will not be possible unless multi-stakeholder cooperation and collaboration are in place among Governments, the private sector, academia and civil society at the national level and also at the regional and global levels. Regional and global cooperation platforms, such as that offered by the Asia-Pacific Information Superhighway initiative, can be particularly important in addressing challenges and identifying common solutions and approaches in Asia and the Pacific.

D.   Reducing the cost of broadband access and enhancing inclusive broadband

15.   More and more people in the Asia-Pacific region are expected to access the Internet on their mobile devices. According to an industry estimate, monthly mobile data traffic volume globally is expected to increase from 15 exabytes per month in 2017 to 105 exabytes in 2023, mainly driven by a

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[3]   ITU, *ICTs, LDCs and the SDGs: Achieving Universal and Affordable Internet in the Least Developed Countries* (Geneva, 2018).

[4]   ESCAP, "Fibre-Optic Co-deployment along the Asian Highways and Trans-Asian Railways for e-resilience: the cases of India and Bangladesh", Asia-Pacific Information Superhighway Working Paper Series (Bangkok, 2018); and ESCAP, "A study on cost-benefit analysis of fibre-optic co-deployment with the Asian Highway connectivity", Asia-Pacific Information Superhighway Working Paper Series (Bangkok, 2018).

[5]   ESCAP, "Infrastructure co-deployment with electricity infrastructure in the case of Bhutan", Asia-Pacific Information Superhighway Working Paper Series (forthcoming).

demand for video content. In 2017, 56 per cent of mobile data traffic carried video content, which is expected to increase to 73 per cent in 2023.[6]

16.   This exponential growth is anticipated not only for mobile data traffic demand but also for that of fixed broadband.[7] As highlighted in an ESCAP report, such growth would inevitably impact existing broadband infrastructure as well as future development plans.[8] For instance, 51 per cent of mobile data traffic would be offloaded to fixed broadband networks via Wi-Fi and other technologies in 2022. It is estimated that 19.6 per cent of traffic will originate from mobile devices, while the rest will originate from fixed broadband and Wi-Fi devices.[9] These figures underline the importance not only of mobile broadband networks but also of developing fixed-broadband infrastructure which can absorb the exponentially growing data demand.

17.   This phenomenon affects not only infrastructure needs but also how people access the Internet and use it for socioeconomic empowerment. According to a study by the Internet Society with 1,620 respondents in 37 countries, the share of smart phone ownership ranged from 94 per cent (45–59 years old) to 96 per cent (15–24 years old). The same survey indicated that the majority of respondents (72 per cent) prefer to use Wi-Fi over other means (28 per cent). The preference for Wi-Fi is higher among respondents from emerging economies (77 per cent) and those who use mobile as their secondary Internet device (78 per cent).[10]

18.   The availability of Wi-Fi hotspots is important for people who otherwise would not be able to access the Internet for socioeconomic reasons. Public Wi-Fi in particular is a low-cost technology for accessing the Internet, especially in developing countries. According to a survey conducted by the Alliance for Affordable Internet with 8,000 users across eight developing countries, public Wi-Fi was one of the most popular services for accessing the Internet. Twenty-one per cent of survey respondents identified public Wi-Fi as their primary method of Internet access to meet their online needs and to keep costs low. Women were more likely than men to use Wi-Fi (34 per cent of women compared to 27 per cent of men).[11]

19.   These findings are similar to those of the Economist Intelligence Unit. In that survey, globally, 74.4 per cent of the respondents said that the Internet was the most effective tool to find jobs, while 76.5 per cent said they had used it to develop skills to improve employability. The percentage of respondents who purchased goods and services online increased from 87.8 per cent in 2018 to 89.5 per cent in 2019. However, the overall conclusion of the report echoed that of the ESCAP study findings, adding that the digital divide was in fact widening and socioeconomic opportunities among entrepreneurs, the

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[6]   Ericsson, *Eriksson Mobility Report: June 2018* (Sweden, 2018).

[7]   ESCAP, *Updated Analysis of the Broadband Infrastructure in Asia Pacific* (Bangkok, 2016).

[8]   ESCAP, *Artificial Intelligence and Broadband Divide: State of ICT Connectivity in Asia and the Pacific* (Bangkok, 2017).

[9]   Cisco, *Cisco Visual Networking Index: Global Mobile Data Traffic Forecast Update, 2017–2022 White Paper* (Cisco, 2019).

[10]   Internet Society, "Mobile Internet Usage Trends in Asia-Pacific", February 2016.

[11]   Alliance for Affordable Internet, "Mobile data services: exploring user experiences & perceived benefits", The Impacts of Emerging Mobile Data Services in Developing Countries, Research Brief No. 2 (Washington, D.C., World Wide Web Foundation, June 2016).

underemployed and people in low-income countries were particularly constrained by poor connectivity.
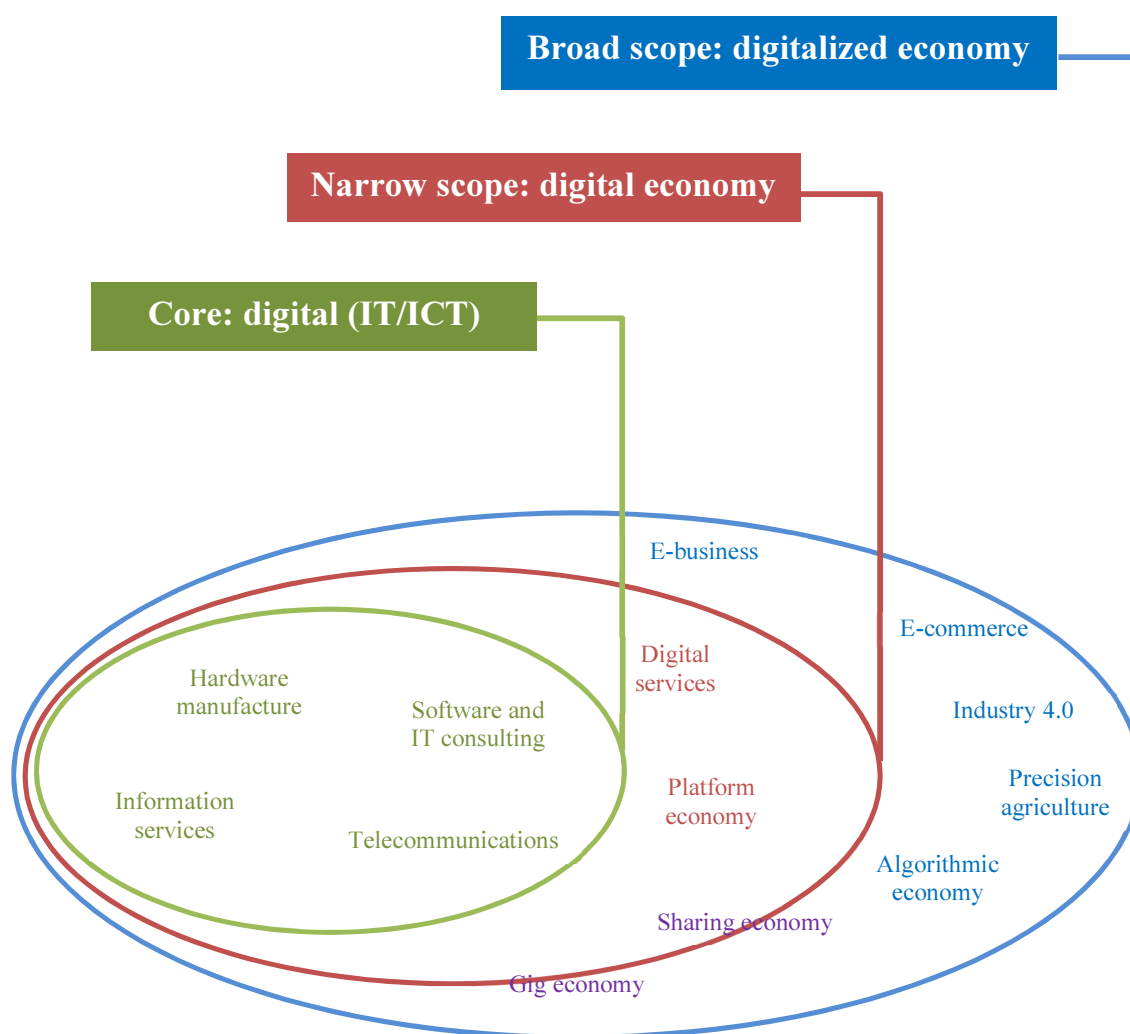
20.   These are just some of the approaches and technologies that could be scaled up for the purpose of reducing the costs of broadband infrastructure development, expanding broadband access among the poor and vulnerable groups, and realizing inclusive and sustainable development in the region as envisioned in the Asia-Pacific Information Superhighway initiative.

II.   The digital economy and electronic commerce

A.   Introduction

21.   While there is no widely accepted definition of the digital economy, a useful approach may be to distinguish between core, narrow and broad scopes of the digital economy (figure V). The core and narrow scopes relate to the ICT producing sector and encompass various digital services (for example, outsourced call centre services) and platform economy services (for example, Facebook and Google), respectively. The broad scope includes the use of various digital technologies for performing activities such as electronic business, electronic commerce, automation and artificial intelligence, the sharing economy (for example, Alibaba and Airbnb) and online labour platforms (for example, Upwork and Amazon Mechanical Turk).

Figure V
A representation of the digital economy

Broad scope: digitalized economy

Narrow scope: digital economy

Core: digital (IT/ICT)

E-business

Digital
services

E-commerce

Hardware
manufacture

Software and
IT consulting

Industry 4.0

Information
services

Platform
economy

Precision
agriculture

Telecommunications

Algorithmic
economy

Sharing economy

Gig economy

Source: R. Bukht and R. Heeks, "Defining, conceptualizing and measuring the digital economy", Development Informatics Working Paper No. 68 (Centre for Development Informatics, University of Manchester, Manchester, 2017).

Abbreviations: IT, information technology.

22. The lack of a widely accepted definition of the digital economy and the lack of industry and product classification for Internet platforms and associated services are hurdles to measuring the digital economy.[12] Nevertheless, a few indicators may shed light on the rapid development of digitization. Internet traffic was 66 times higher in 2018 than in 2005. Global electronic commerce sales reached $25 trillion in 2015, including $189 billion in cross-border electronic commerce. Nearly 90 per cent of the 750 million people that went online for the first time between 2012 and 2015 were in developing countries.

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[12] The challenges of measuring the digital economy have been discussed by the International Monetary Fund (IMF) in "Measuring the digital economy", staff report prepared by IMF staff and presented to the Executive Board in an informal session on 28 February 2018. Available at www.imf.org/en/Publications/Policy-Papers/Issues/2018/04/03/022818-measuring-the-digital-economy.

There were 100 million people employed in the ICT sector in 2015, while ICT services exports rose by 40 per cent between 2010 and 2015.[13]

23. The focus of this part of the document is on electronic commerce, as a specific element of the digital economy, in response to the strong interest shown by countries worldwide and the region as highlighted by a joint statement issued by 76 members of the World Trade Organization (WTO) on 25 January 2019, confirming their intention to start negotiations on electronic commerce. Collectively, these 76 economies – including 17 economies located in Asia and the Pacific – account for 90 per cent of global trade.

24. The joint statement highlighted the key issues related to the negotiation: (a) the negotiation will centre on trade-related aspects of electronic commerce; (b) the negotiation will build on existing WTO agreements and frameworks; and (c) opportunities and challenges faced by the members of WTO, including developing countries and least developed countries, as well as by micro-, small and medium-sized enterprises, in relation to electronic commerce, will be taken into consideration during the negotiation (see www.wto.org/english/news_e/n ews19_e/dgra_25jan19_e.htm).

25. These key issues are discussed in the remaining sections of the present document with a particular focus on the regional context. Furthermore, the discussion also covers the definition of electronic commerce and its relationship with inclusive and sustainable development.

B.   Electronic commerce for inclusive and sustainable development

26. While definitions vary, electronic commerce generally refers to the production, advertising, sale and distribution of products through electronic means. Electronic commerce can occur within and between three basic participant groups – business, government and individuals. Electronic commerce can be divided into domestic (internal) trade and cross-border trade, depending on whether the seller and buyer are located in the same country or not.

27. Electronic commerce is multisectoral by nature. It encompasses multiple sectors such as ICT infrastructure, logistics and trade facilitation and touches on many other areas, including legal frameworks, electronic payments, electronic commerce platforms and electronic procurement, as well as awareness-raising and skills development.

28. Electronic commerce has become a bridge between enterprises in small, isolated countries and larger markets globally. Compared to traditional trade, electronic commerce helps local businesses, especially micro- and small enterprises, and individuals, to reach a broader domestic or international market.

29. In the context of 2030 Agenda for Sustainable Development, electronic commerce could be a key tool for achieving the Sustainable Development Goals in the following ways:

(a)   Electronic commerce can be leveraged to promote the empowerment of women as entrepreneurs and traders (target 5.b);

(b)   Electronic commerce can support productive activities, decent job creation, entrepreneurship, creativity and innovation and encourage the

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[13] *Information Economy Report 2017: Digitization, Trade and Development* (United Nations publication, Sales No. E.17.II.D.8).

formalization and growth of micro-, small and medium-sized enterprises in developing countries, including through access to ICT-enabled financial services, such as online and mobile payments (Goal 8.3);

(c)   Electronic commerce can promote the integration of micro-, small and medium-sized enterprises into value chains and markets (for example, by leveraging virtual marketplaces) (Goal 9.3);

(d)   Electronic commerce can help to increase the exports of developing countries (Goal 17.11), in particular with a view to doubling the share of global exports of least developed countries by 2020.[14]

30.   However, challenges to fully utilizing electronic commerce as a tool for inclusive and sustainable development remain, as many households, rural smallholders, and micro- and small enterprises are not able to participate in or benefit from electronic commerce. Furthermore, the competition created by electronic commerce may put substantial pressure on traditional bricks-and-mortar small-scale retailers and local suppliers (such as local producers and vendors) and in some cases may force them out of the market.

C.   State of play of electronic commerce in the region

31.   The Asia-Pacific region is emerging as a leading force in the global electronic commerce market. The region accounted for more than 40 per cent of the global electronic commerce transactions in 2015 (more than $1 trillion) and also experienced the highest growth rate in 2015, at 28 per cent.[15]

32.   Three of the four largest national electronic commerce markets in the world are in the Asia-Pacific region: China, Japan and the Republic of Korea; China boasts the world's largest market for business-to-consumer electronic commerce.

33.   The business-to-consumer electronic commerce index developed by the United Nations Conference on Trade and Development (UNCTAD) is able to show strong disparities among economies in the region. Among developing countries, Singapore, the Republic of Korea and Malaysia are at the top of the ranking. The least developed countries in the region, including Nepal, Cambodia, Myanmar and Afghanistan, lag behind (figure VI).

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[14]   Organization for Economic Cooperation and Development and WTO, *Aid for Trade at a Glance 2017: Promoting Trade, Inclusiveness and Connectivity for Sustainable Development* (Paris, 2017).

[15]   More detailed definitions of electronic commerce are available from ESCAP and the Asian Development Bank (ADB) in *Embracing the E-Commerce Revolution in Asia and the Pacific* (Manila, ADB, 2018).

Figure VI
Ranking according to the United Nations Conference on Trade and Development B2C E-commerce Index 2018
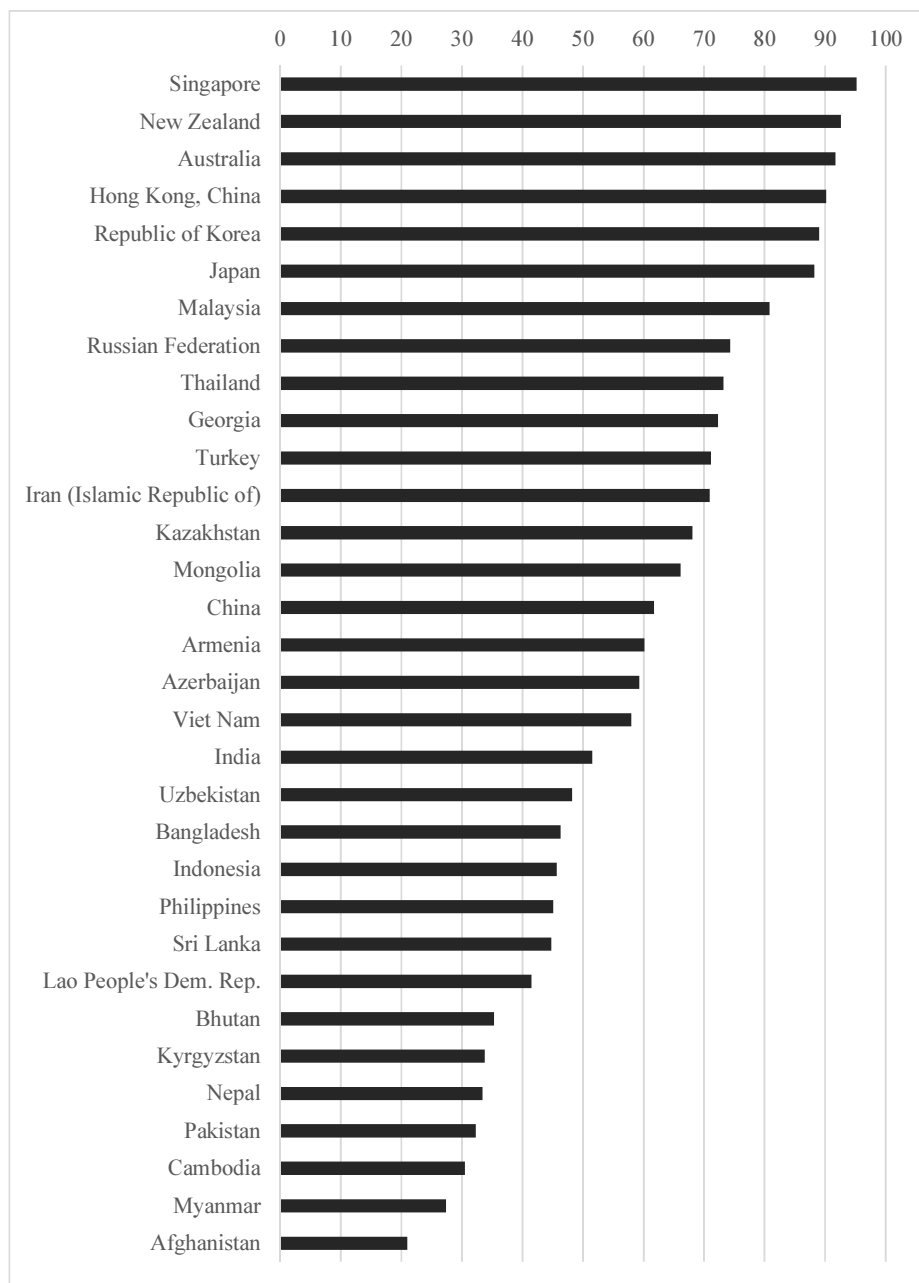
Source: UNCTAD, "UNCTAD B2C E-commerce Index 2018: Focus on Africa", UNCTAD Technical Notes on ICT for Development, No. 12, table 8, pp. 18–21. Available at https://unctad.org/en/PublicationsLibrary/tn_unctad_ict4d12_en.pdf.

D. Addressing challenges to trade-related electronic commerce in the region

34. Many trade rules can be applied to electronic commerce. By and large, cross-border electronic commerce is related to at least three areas of international trade:

(a) Market access, which involves a wide range of topics including customs duties, valuation issues, movement of natural persons and access to data;

(b) Rules and regulations, which touch on issues such as intellectual property rights, protection of personal information, consumer protection and competition;

(c) Facilitation, which covers areas such as paperless trade, electronic signatures and digital authentication.[16]

35. Globally, WTO plays a key role in facilitating discussions on electronic commerce. In 1998, WTO established the Work Programme on Electronic Commerce to examine electronic commerce issues related to four major areas: trade in services; trade in goods; intellectual property rights; and trade and development. In recent years, the discussions about the future of the Work Programme and electronic commerce discussions in general have intensified at WTO, especially since July 2016, when some members proposed negotiating new rules and pushing electronic commerce negotiations onto the WTO agenda. This was opposed by many developing countries as they argued that it was contrary to the current mandate of the Work Programme, as well as the Nairobi Ministerial Declaration that put the remaining Doha Round issues at the core of the negotiations at WTO.[17] More recently, the eleventh Ministerial Conference of the World Trade Organization, held in December 2017, agreed to continue the work under the Work Programme and maintain the current practice of not imposing customs duties on electronic transmissions until the next session, which will be held in 2019.[18]

36. The Agreement on Trade Facilitation, the first multilateral agreement under the auspices of WTO, is not an electronic commerce treaty per se, as it does not discriminate between the types of trade to which it can be applied, whether goods purchased online or through traditional means. Nevertheless, the Agreement on Trade Facilitation, when implemented, can greatly boost the development of cross-border electronic commerce because it will simplify and streamline border-crossing procedures, enhance the transparency of trade rules and regulations, and support efficient and reliable international deliveries. On the other hand, as the Agreement on Trade Facilitation is not specifically designed to address cross-border electronic commerce, which is often characterized by a large number of parcels rather than containers or traditional bulk or general cargoes, the Agreement alone certainly cannot cope with all the challenges related to electronic commerce delivery and logistics.

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[16] Amir Ebrahimi Darsinouei, *Understanding E-Commerce Issues in Trade Agreements: A Development Perspective Towards MC11 and Beyond* (Geneva, CUTS International, 2017).

[17] The South Centre, "The WTO's discussions on electronic commerce", Analytical Note, No. SC/AN/TDP/2017/2 (Geneva, 2017).

[18] See WTO, document WT/MIN(17)/65-WT/L/1032.

37.   The United Nations Commission on International Trade Law plays an important role in promoting cross-border electronic commerce. Its Model Law on Electronic Commerce was created to enable and facilitate commerce conducted using electronic means by providing national legislators with a set of internationally acceptable rules aimed at removing legal obstacles and increasing legal predictability for electronic commerce.

38.   Electronic commerce has found its way into regional initiatives, including regional trade agreements. Sixty-nine of the regional trade agreements signed and submitted to WTO between 2001 and 2016 had either a standalone electronic commerce chapter or electronic commerce-related articles. However, the scope, depth and binding nature of these chapters and provisions differ widely. At one extreme are several relatively recent regional trade agreements whose electronic commerce chapters address a wide range of digital trade issues, including data localization and the treatment of source code. At the other end of the spectrum are those treaties that only restrict customs duties for electronic commerce transactions and seek cooperation between regulatory authorities. To date, not a single least developed country has agreed to a regional trade agreement with an electronic commerce chapter; however, the Governments of two least developed countries in the region, Cambodia and the Lao People's Democratic Republic, agreed to a regional trade agreement with some electronic commerce provisions.[19]

39.   On 12 November 2018, economic ministers from the 10 members of the Association of Southeast Asian Nations (ASEAN), including three least developed countries – Cambodia, the Lao People's Democratic Republic and Myanmar – signed an agreement to facilitate cross-border electronic commerce transactions.[20] While the effectiveness of the implementation of the agreement remains to be seen, the agreement certainly holds promise for developing a cooperative and conducive environment for conducting electronic commerce in the region.

E.   Secretariat support to member States for developing electronic commerce

40.   To support countries in the region in developing electronic commerce, the secretariat carries out research and analysis[21] and provides technical assistance and capability-building to support its members.[22] As highlighted by the Framework Agreement on Facilitation of Cross-border Paperless Trade in Asia and the Pacific, it advocates for a regional solution to enhancing electronic commerce.

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[19]   Mark Wu, "Digital trade-related provisions in regional trade agreements: existing models and lessons for the multilateral trade system" (Geneva, International Centre for Trade and Sustainable Development; Washington, D.C., Inter-American Development Bank, 2017).

[20]   See Tang See Kit, "ASEAN economic ministers ink first e-commerce agreement", Channel NewsAsia, 12 November 2018.

[21]   The secretariat and ADB published a report to review the opportunities and challenges for developing electronic commerce in the region: *Embracing the E-commerce Revolution in Asia and the Pacific* (Manila, ADB, 2018).

[22]   In 2018, the secretariat and ADB organized two workshops to build the capacity of policymakers on electronic commerce. Further information is available at www.unescap.org/events/adb-escap-wto-conference-promoting-connectivity-inclusive-asia-and-pacific and www.unescap.org/events/adb-escap-workshop-promoting-e-commerce-asia-and-pacific-holistic-approach.

41.   The secretariat will continue to serve as a bridge connecting global partners and the private sector with the countries in the region. Subject to the availability of resources, the secretariat will work with partners to carry out more in-depth studies on cross-border electronic commerce. The outcome of the studies will be used to provide advice to countries, especially the least developed countries, on how to improve their legal and business environments to facilitate cross-border electronic commerce as a vehicle for strengthening their exports.[23] The secretariat, together with relevant partners, will continue to build the capacity of policymakers in the region in electronic commerce. Furthermore, the secretariat will explore the possibility of working with partners, including the private sector, to support countries in implementing pilot projects on cross-border electronic commerce.

III.   Issues for consideration by the Commission

42.   With regards to digital connectivity – based on the analyses provided by the secretariat – the Commission may wish to provide guidance to the secretariat on the proposed future direction of work, including the following:

(a)   What are effective measures to strengthen collaboration with various sectors, such as transport and energy, to accelerate the implementation of the Asia-Pacific Information Superhighway initiative to narrow the digital divide;

(b)   What targeted support can be provided to bridge the broadband divide among countries with special needs;

(c)   What are the challenges and opportunities that should be addressed by the secretariat's research and analyses in support of the implementation of the Asia-Pacific Information Superhighway initiative, in particular cost-efficient approaches, such as co-deployment and infrastructure sharing, and emerging digital technologies and their implications for sustainable development.

43.   With regard to the digital economy and electronic commerce, the Commission may wish to discuss the following matters, ideally by reflecting on the experiences of member States:

(a)   As the digital economy and electronic commerce are multisectoral by nature, how can government agencies and ministries, together with other partners, including the private sector, work together to promote the digital economy and electronic commerce for inclusive and sustainable development;

(b)   As data on the digital economy and electronic commerce underpin evidence-based policymaking, what are the solutions to collect such data.

44.   Additionally, the Commission may wish to guide the secretariat on areas of cross-sectoral collaboration to support the achievement of all other Sustainable Development Goals in addition to Goals 4, 5, 9 and 17, through the implementation of the Asia-Pacific Information Superhighway initiative. The Commission may also wish to discuss other issues contained in the present document.

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[23]   Sustainable Development Goal target 17.11 aims to significantly increase the exports of developing countries, in particular with a view to doubling the least developed countries' share of global exports by 2020.